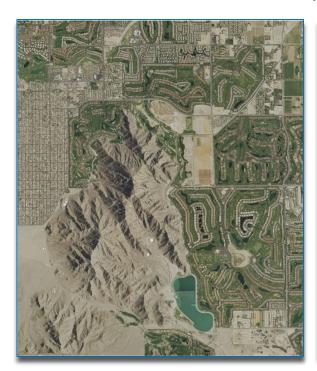


2014 NAIP Summary Briefing 2 December, 2014

Ron Hoffmann, President Craig Molander, Senior Vice President Tim Bohn, Director of Project Management







State Project Areas

State	DOQQs	Sq Mi	Seasons
California	11,152*	164,891	4
Utah	6,032	87,040	1
Iowa	4,239	58,733	1
Missouri	5,018	73,386	1
Mississippi	3,236	50,776	1
5 States	29,677	434,826	8 Seasons

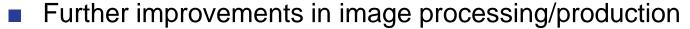


•57 DOQQs added on CA/MX border by IBWC (International Boundary and Water Commission)



Changes in 2014

- Exclusive use of Leica ADS100 camera
- Acquisition at 40cm GSD
 - Flying height ~16,500' AGL
 - Delivery of 1m DOQQs to USDA
 - HR processing to 30cm for licensed data resale



- Integration of ADS100 into Surdex acquisition and production processes
- Continued to improved automated seamline/seamline edit
- Continued to improve Block and Global balancing



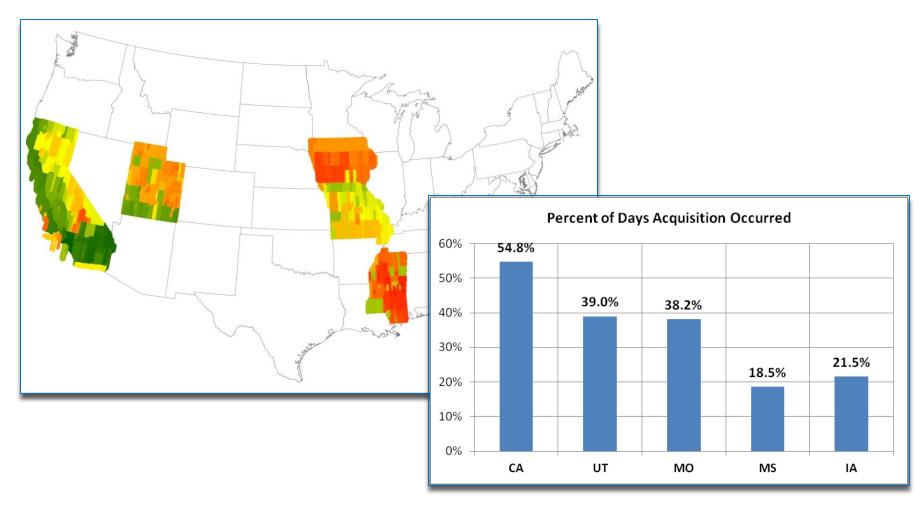


Acquisition

- Six (6) aircraft
 - Surdex 4 Cessna 441 (Conquest) w RVSM
 - DAS 1 Cessna 441 (Conquest) w RVSM
 - Aerial Surveys International (ASI) Cheyenne
 - One ADS100 leased from Leica for ASI aircraft
- Total project time span:
 - 128 / 173 days involved acquisition 74%
- By all accounts an adverse weather situation
 - Mild and wet in Midwest/South
 - Numerous overcast days
- Dealing with Mexican airspace
 - Support from IBWC
 - Required to land in Mexico for aircraft inspection



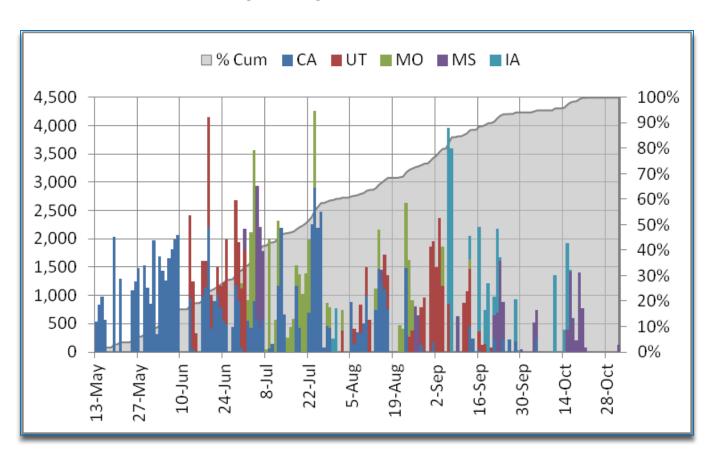
Acquisition Chronology





Acquisition Profile (Aggregate FSLM/Day)

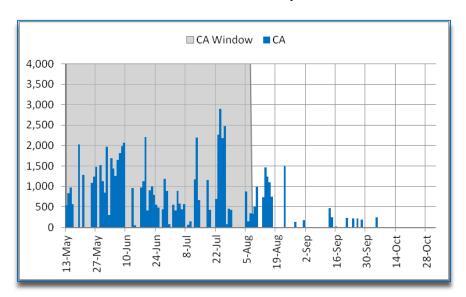
FSLM – Flight Segment Line Miles



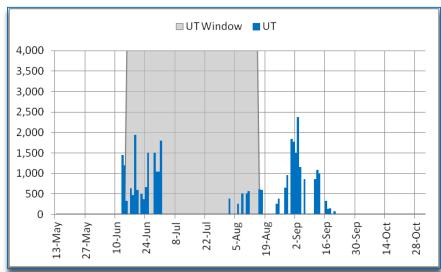


FSLM per day and contracted season window(s)

California – earliest start, 4 seasons, Mexican DOQQs, airspace issues



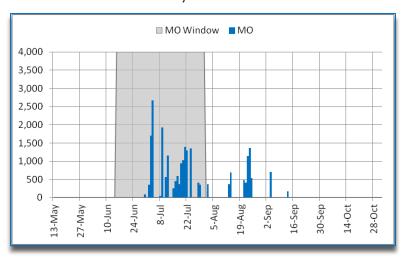
Utah – July weather challenges





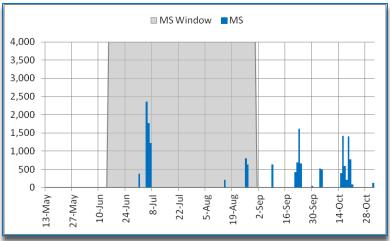
FSLM per day and contracted season window(s)

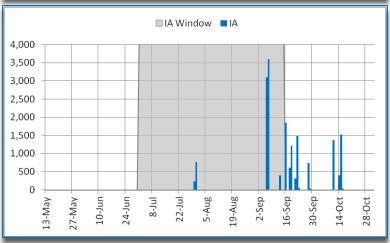
Missouri – cooler, wetter than normal



Iowa – July/August weather

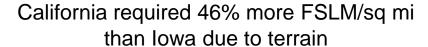
Mississippi – Gulf Coast challenges

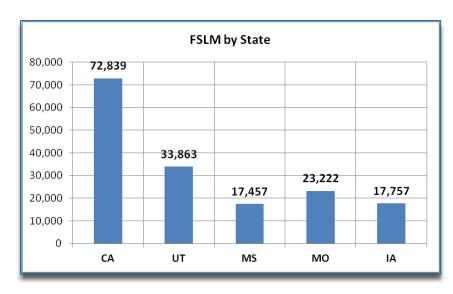


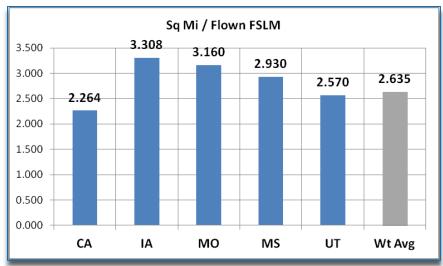




Flying Lower – Impact of Terrain Ruggedness









Tim's Reward for Working the Mexican Airspace Issues....





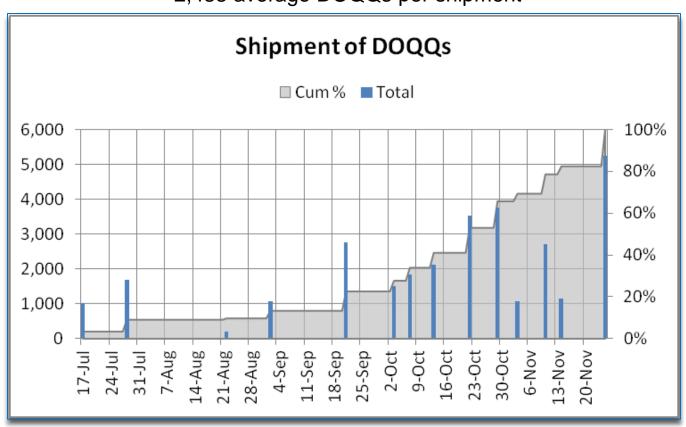
Production Phase

- All production done by Surdex
 - Image processing
 - Aerotriangulation
 - Ortho/mosaicking
 - Product formatting
 - QC
- All DOQQ & CCM deliveries were on-time
- Production of 30cm product did not interfere with 1m DOQQs
 - Followed production of 1m
 - Requires considerably more IT resources



Shipment Profile

14 shipments 2,433 average DOQQs per shipment



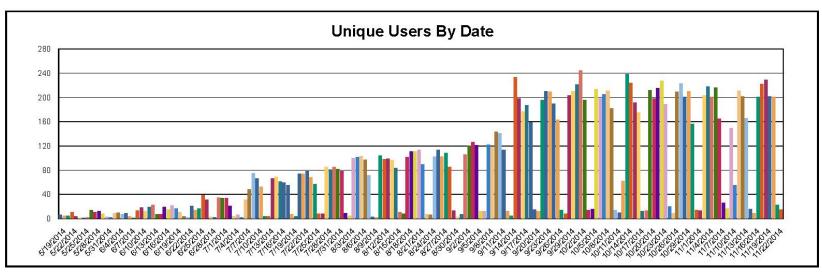


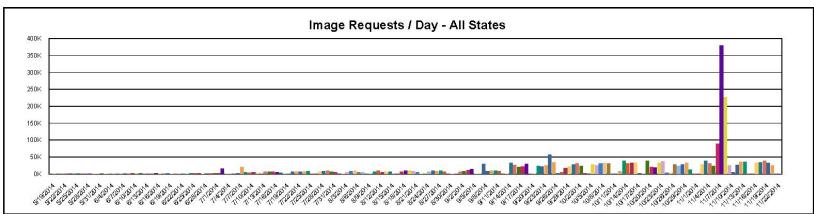
Early Access Web Services (EAWS)

- CA, UT, MO, IA contracted
 - Surdex voluntarily added MS
- Surdex used ESRI ImageServer
 - Organic and cloud resources
- PulseMonitor software for reporting
- Heavily automated process some touchup required
- Demand never exceeded resources



Current EAWS Report Summary

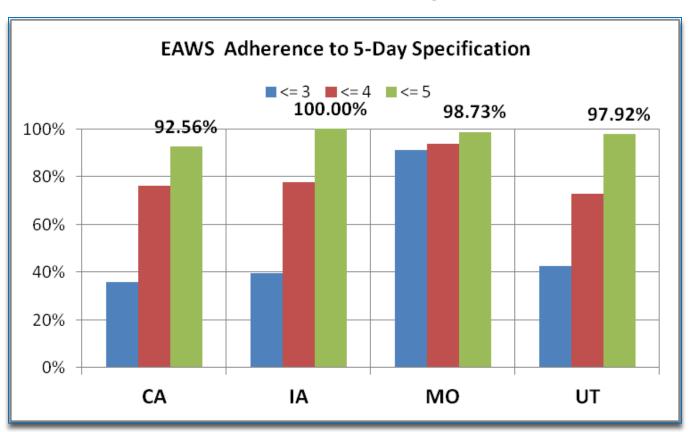






Adherence to EAWS 5-Day Specification

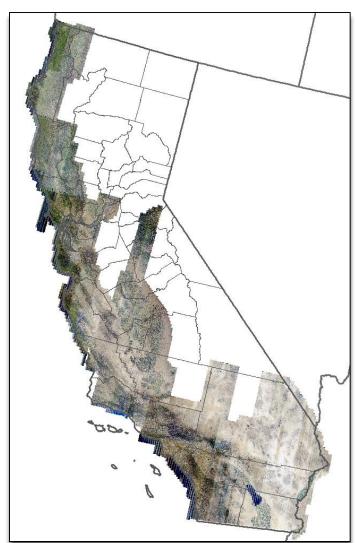
2.98 Business Days Weighted Average (CA cut-off for FedEx overnight is 2pm!)





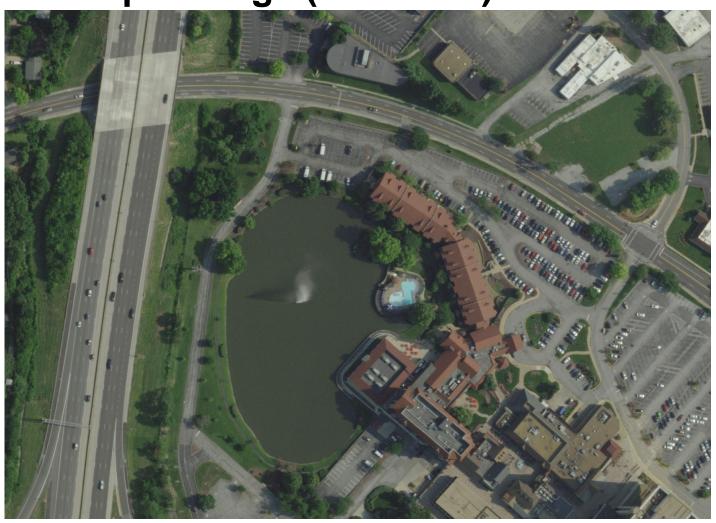
California and LAX EAWS







30cm Sample Image (STL Area)





30cm Sample Image (STL Area)

